Energy Fuels Resources (USA) Inc.
225 Union Blvd. Suite 600
Lakewood, CO. US, 80228
303 974 2140
www.energyfuels.com

VIA EMAIL AND OVERNIGHT DELIVERY

November 15, 2013

Mr. Bryce Bird
Director, Utah Division of Air Quality
State of Utah Department of Environmental Quality
195 North 1950 West
Salt Lake City, UT 84116

Re: White Mesa Uranium Mill,
National Emissions Standards for Radon Emission from Operating Mill Tailings
Transmittal of October 2013 Monthly Radon Flux Monitoring Report for Cell 2

Dear Mr. Bird:

This letter transmits Energy Fuels Resources (USA) Inc.'s ("EFRI's") radon-222 flux monitoring report for October 2013 (the "Monthly Report") pursuant to 40 CFR 61.254(b), for Cell 2 at the White Mesa Uranium Mill (the "Mill"). Cell 2, which was constructed and placed into operation prior to December 15, 1989 is subject to the requirements in 40 CFR 61.252(a). As discussed in our 2012 Annual Radon Flux Monitoring Report submitted March 29, 2013, Cell 2 was not in compliance with the emissions limits in 40 CFR 61.252(a) of 20 pCi/(m^2 -sec) for the calendar year 2012. This Monthly Report is submitted pursuant to 40 CFR 261(b) which requires monthly reporting of monitoring data collected beginning the month immediately following the submittal of the annual report for the year in non-compliance.

Included with the Monthly Report is a Radon Flux Measurement Program Report, dated October 2013, prepared by Tellco Environmental (the "Tellco October 2013 Monthly Report"). The Tellco October 2013 Monthly Report indicates that for the month of October 2013, the average radon flux from Cell 2 of 19.0 pCi/(m^2 -sec), complied with the standard in 40 CFR 61.252(a).

If you have any questions, please feel free to contact me at (303) 389-4132.

Yours very truly,

Energy Fuels Resources (USA) Inc.
Jo Ann Tischler
Manager, Compliance and Licensing

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cc: David C. Frydenlund
Phil Goble, Utah DRC
Dan Hillsten
Rusty Lundberg, Utah DRC
Jay Morris, Utah DAQ
Harold R. Roberts
David E. Turk
Kathy Weinel
Director, Air and Toxics Technical Enforcement Program, Office of Enforcement, Compliance and Environmental Justice, U. S. Environmental Protection Agency

Attachments

ENERGY FUELS RESOURCES (USA) INC.
40 CODE OF FEDERAL REGULATIONS 61 SUBPART W

WHITE MESA MILL
SAN JUAN COUNTY, UTAH

TAILINGS CELL 2 MONTHLY COMPLIANCE REPORT FOR OCTOBER 2013

Submitted November 15, 2013

by

Energy Fuels Resources (USA) Inc.
225 Union Blvd. Suite 600
Lakewood, Colorado 80228
(303) 974-2140

1) Name and Location of the Facility

Energy Fuels Resources (USA) Inc. ("EFRI") operates the White Mesa Mill (the "Mill"), located in central San Juan County, Utah, approximately 6 miles (9.5 km) south of the city of Blanding. The Mill can be reached by private road, approximately 0.5 miles west of Utah State Highway 191. Within San Juan County, the Mill is located on fee land and mill site claims, covering approximately 5,415 acres, encompassing all or part of Sections 21, 22, 27, 28, 29, 32, and 33 of T37S, R22E, and Sections 4, 5, 6, 8, 9, and 16 of T38S, R22E, Salt Lake Base and Meridian.

All operations authorized by the Mill's State of Utah Radioactive Materials License are conducted within the confines of the existing site boundary. The milling facility currently occupies approximately 50 acres and the tailings disposal cells encompass another 275 acres.

2) Monthly Report

This Report is the monthly report for the Mill's Cell 2 for October 2013, required under 40 Code of Federal Regulations (CFR) 61.254(b).

A summary of the events that gave rise to the requirement to file this monthly report under 40 CFR 61.254(b) is set out in Section 4 of this Report. A summary of the radon emissions from Cell 2 measured in October 2013 is set out in Section 5 of this Report.

The monthly monitoring data for October 2013 required under 40 CFR 61.254(b) is provided in Attachment 1 to this Report, which contains the Radon Flux Measurement Program Report, dated October 2013, prepared by Tellco Environmental (the "Tellco October 2013 Monthly Report"). The results are summarized in Section 5 of this Report.

3) Name of the Person Responsible for Operation and Preparer of Report

Energy Fuels Resources (USA) Inc.
225 Union Boulevard, Suite 600
Lakewood, Colorado 80228
303.628.7798 (phone)
303.389.4125 (fax)

EFRI is the operator of the Mill and its tailings impoundments (Cells 2, 3, and 4A) and evaporation impoundments (Cells 1 and 4B). The Mill is an operating conventional uranium mill, processing both conventional ores and alternate feed materials. The "method of operations" at the Mill is phased disposal of tailings. Compliance with the NESHAP standards at 40 CFR 61.252(a) is determined annually for existing impoundments (i.e., Cells 2 and 3). The annual radon emissions for existing impoundments are measured using Large Area Activated Charcoal Canisters in conformance with 40 CFR, Part 61, Appendix B, Method 115, Restrictions to Radon Flux Measurements, (Environmental Protection Agency ["EPA"], 2008). These canisters are passive gas adsorption sampling devices used to determine the flux rate of Radon-222 gas from the surface of the tailings material. For impoundments licensed for use after December 15, 1989 (i.e., Cell 4A, and 4B), EFRI employs the work practice standard listed at 40 CFR 61.252(b)(1) in that all tailings impoundments constructed or licensed after that date are lined, are no more than 40 acres in area, and no more than two impoundments are operated for tailings disposal at any one time.

EFRI is submitting this monthly compliance report in conformance with the standards in 40 CFR 61.254(b).

4) Background Information -- Summary of 2012 Annual Report

Facility History

Cells 2 and 3, which have surface areas of 270,624 m^2 (approximately 66 acres) and 288,858 m^2 (approximately 71 acres), respectively, were constructed prior to December 15, 1989 and are considered "existing impoundments" as defined in 40 CFR 61.251. Radon flux from Cells 2 and 3 is monitored annually, as discussed below.

Cells 4A and 4B were constructed after December 15, 1989, and are subject to the work practice standards in 40 CFR 61.252(b)(1), which require that the maximum surface area of each cell not exceed 40 acres. For this reason, Cells 4A and 4B are not required to undergo annual radon flux monitoring.

Cell 3, which is nearly filled, and Cell 4A, receive the Mill's tailings sands. Cells 1 and 4B, receive solutions only, and are in operation as evaporative ponds. Cell 2 is filled with tailings, is covered with an interim soil cover, and is no longer in operation.

Dewatering of Cell 2

The Utah Division of Water Quality issued Groundwater Discharge Permit ("GWDP") UGW-370004 in 2005. Under Part I.D.3 of the current GWDP, EFRI has been required to accelerate dewatering of the solutions in the Cell 2 slimes drain. Dewatering of Cell 2 began in 2008. In mid-2011, changes were made in the pumping procedures for slimes drain dewatering of Cell 2 that resulted in an acceleration of dewatering since that time. As discussed in more detail below, studies performed by EFRI indicate that the increase in radon flux from Cell 2 has likely been caused by these dewatering activities. No other changes appear to have occurred in condition, use, or monitoring of Cell 2 that could have resulted in an increase in radon flux from the cell.

The average water level in the Cell 2 slimes drain standpipe for each of the years 2008 through 2012 indicate that water levels in Cell 2 have decreased approximately 3.25 feet (5600.56 to 5597.31 fmsl) since 2008. Of this decrease in water level, approximately 1 foot occurred between 2010 and 2011, reflecting the improved dewatering that commenced part way through 2011, and approximately 2 feet between 2011 and 2012, reflecting improved dewatering for all of 2012.

Radon Flux Monitoring of Cell 2

Tellco performed the 2012 radon flux sampling during the second quarter of 2012 in the month of June. On June 25, 2012, Tellco advised EFRI that the average radon flux for Cell 2 from samples taken in June 2012 was 23.1 pCi/(m^2-sec) (referred to in the Tellco report as pCi/m^2-s), which exceeded the Subpart W requirement. The result of the 2012 radon-222 flux monitoring for Cell 3 was 18 pCi/(m^2-sec). Cell 3, therefore, was in compliance with this standard for 2012.

40 CFR 61.253 provides that:

> "When measurements are to be made over a one year period, EPA shall be provided with a schedule of the measurement frequency to be used. The schedule may be submitted to EPA prior to or after the first measurement period."

EFRI advised the Utah Division of Air Quality ("DAQ"), by notices submitted on August 3 and September 14, 2012, that EFRI planned to collect additional samples from Cell 2 in the third and fourth quarters of 2012. These samples were collected on September 9, October 21, and November 21, 2012,

respectively. As the June 2012 monitoring for Cell 3 indicated that it was in compliance with the standard, further monitoring of Cell 3 was not performed.

The result of the 2012 radon-222 flux monitoring for Cell 2 was 25.9 pCi/(m^2-sec) (averaged over four monitoring events). The measured radon flux from Cell 2 in 2012 therefore exceeded the standard in 40 CFR 61.252(a) of 20 pCi/(m^2-sec).

The Cell 2 and Cell 3 radon flux results were reported in EFRI's 2012 Annual Radon Flux Monitoring Report (the "2012 Annual Report").

The provisions of 40 CFR 61.254(b) requires that:

> "If the facility is not in compliance with the emission limits of paragraph 61.252 in the calendar year covered by the report, then the facility must commence reporting to the Administrator on a monthly basis the information listed in paragraph (a) of this section, for the preceding month. These reports will start the month immediately following the submittal of the annual report for the year in non-compliance and will be due 30 days following the end of each month."

This Report is the required monthly report for October 2013 for Cell 2. Monthly monitoring will continue until US EPA or DAQ determines that it is no longer required.

Evaluation of Potential Factors Affecting Radon Flux

In an attempt to identify the cause of the increase in radon flux at Cell 2, EFRI conducted a number of evaluations including:

- Excavation of a series of 10 test pits in the Cell 2 sands to collect additional information needed to ascertain factors affecting radon flow path and flux,
- Evaluation of radon trends relative to slimes drain dewatering,
- Development of correlation factors relating dewatering rates to radon flux, and
- Estimation of the thickness of temporary cover that would be required to achieve compliance with the radon flux standard of 20 pCi/(m^2-sec), during the dewatering process.

These studies and results are discussed in detail in EFRI's 2012 Annual Radon Flux Report and summarized in the remainder of this section.

Slimes drain dewatering data indicate that a lowering of the water level in Cell 2 has resulted in an increase in the average radon flux, and that an increase in water level has resulted in a decrease in the average radon flux. Changes in radon flux have consistently been inversely proportional to changes in water levels in Cell 2 since 2008. For the last three years the change in radon flux has been between 3 and 5 pCi/(m^2-sec) per each foot of change in water level. It is also noteworthy that the significant increases in radon flux from Cell 2 which occurred between 2010 and 2011 and between 2011 and 2012 coincided with the periods of improved (accelerated) dewatering of Cell 2.

EFRI has evaluated these results and has concluded that the increase in radon-222 flux from Cell 2 that has resulted in the exceedance of the 20 pCi/(m^2-sec) standard in 40 CFR 61.252 (a) in 2012 is most likely the unavoidable result of Cell 2 dewatering activities mandated by the Mill's State of Utah GWDP. This is due to the fact that saturated tailings sands attenuate radon flux more than dry tailings sands, and

the thickness of saturated tailings sands decrease as dewatering progresses. There appear to have been no other changes in conditions at Cell 2 that could have caused this increase in radon flux from Cell 2. These conclusions are supported by evaluations performed by SENES Consultants Limited ("SENES"), who were retained by EFRI to assess the potential effects of dewatering on the radon flux from Cell 2 and to provide calculations of the thickness of temporary cover required to achieve the radon flux standard during the dewatering process.

SENES' evaluations were presented in a report provided as an attachment to EFRI's 2012 Annual Report. SENES estimated a theoretical radon flux from the covered tailings at Cell 2 for various depths (thicknesses) of dry tailings, and predicted future increases in radon flux as a function of decreases in water levels.

In order to explore potential interim actions that could be taken to maintain radon flux within the 20 pCi/(m^2-sec) standard, the SENES study also evaluated the extent to which radon emanations from the cell can be reduced by increasing the thickness of the current interim cover on Cell 2.

5) October 2013 Results

Detailed results for October 2013 for Cell 2 are contained in the Tellco October 2013 Monthly Report. As described in the Tellco October 2013 Monthly Report, monitoring was performed consistent with 40 CFR 61 Subpart W Appendix B, Method 115 radon emissions reporting requirements. The radon monitoring consisted of 100 separate monitoring points at which individual radon flux measurements have been made by collection on carbon canisters. The individual radon flux measurements were averaged to determine compliance with 40 CFR Part 61.252.

The average radon flux for Cell 2 in October 2013 was reported by Tellco to be 19.0 pCi/(m^2-sec). This radon flux value complies the 20 pCi/(m^2-sec) standard in 40 CFR 61.252.

6) Other Information

Status of Proposed Updated Final Cover Design

As part of developing the Mill's final reclamation plan required to achieve the radon flux standard of 20 pCi/(m^2-sec), a final engineered cover design was submitted by TITAN Environmental in 1996 and approved by the US Nuclear Regulatory Commission ("NRC"). An updated final cover design for the Mill's tailings system, submitted in November 2011, is under review by the Utah Division of Radiation Control ("DRC"), and is not currently approved. DRC provided a second round of interrogatories on the proposed cover design and associated Infiltration and Contaminant Transport Model ("ICTM") in February 2013, for which EFRI and its consultant, MWH Inc. are preparing responses.

7) Additional Information Required for Monthly Reports

a) Controls or Other Changes in Operation of the Facility

40 CFR 61.254(b)(1) requires that in addition to all the information required for an Annual Report under 40 CFR 61.254(b), monthly reports shall also include a description of all controls or other changes in operation of the facility that will be or are being installed to bring the facility into compliance.

Based on the evaluations described in Section 4, above, and as discussed during EFRI's March 27, 2013 meeting with DAQ and DRC staff, in addition to the monthly monitoring reported in this Monthly Report,

EFRI has performed the following steps to ensure that radon emissions from Cell 2 are kept as low as reasonably achievable and to bring the facility into compliance with the applicable standard:

Construction and Monitoring of Interim Cover Test Area, and Application of Additional Random Fill

i. EFRI constructed 12 test areas on Cell 2 to assess the effect of the addition of one foot of additional soil cover. EFR applied one foot of random fill moistened and compacted by a dozer to 12 circular test areas of approximately 100 to 120 feet in diameter. The total tested area is larger than the single 100 foot by 100 foot area proposed in previous Cell 2 monthly radon flux monitoring reports. Installation of 12 test areas containing the additional 1 foot of compacted soil was completed by August 2, 2013. Wetting and re-compaction of all 12 areas was completed prior to the start of the September 21, 2013 monthly flux monitoring event.

ii. The radon flux has been monitored monthly at 100 locations on Cell 2, including the 12 test areas, since April 2013.

iii. The effectiveness of the additional compacted cover at the 12 test areas will be evaluated over the next several months. If the desired reduction (to within compliance levels) is achieved on the test areas, EFRI will apply additional random fill at 90% compaction, to the remainder of Cell 2, on or before July 1, 2014. EFRI will perform the 2014 annual radon flux monitoring of Cell 2 after placement of the fill over the entire Cell 2 area.

Based on discussions with DRC, EFRI will proceed with the application of cover and will provide a letter to DRC with information demonstrating that the application of soil cover is consistent with the design and QC requirements of the proposed Reclamation Plan, currently under revision, on the understanding that the application of cover will be credited toward the final cover design.

Interim Corrective Action

EFRI has taken the following additional steps to provide interim mitigation of radon flux from Cell 2. EFRI has identified the areas of elevated radon flux associated with known sources of radiological contamination at or near the surface of the cell cover. Specifically:

- Windblown tailings from Cell 3 which have been deposited on Cell 2 have been removed and re-buried in Cell 3. A berm approximately five feet high, extending the length of the Cell 3 beach has been constructed at the edge of Cell 2, to prevent further carryover of sands from Cell 3 onto the Cell 2 cover.
- Any contaminated material near the surface has been reburied.
- Additional cover material has been added to each of 12 identified areas of elevated flux as described under the section entitled "Interim Cover Test Area", above.
- Monthly radon flux monitoring to assess the effectiveness of the above actions is ongoing.

b) Facility's Performance Under Terms of Judicial or Administrative Enforcement Decree

The Mill is not under a judicial or administrative enforcement decree.

8) Certification

I Certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. See 18 U.S.C. 1001.

Signed: _____ Date: November 21, 2013

David C. Frydenlund

Senior Vice President, General Counsel and Corporate Secretary

ATTACHMENT 1

National Emissions Standards for Hazardous Air Pollutants

2013 Radon Flux Measurement Program

October 2013 Sampling Results

National Emission Standards for Hazardous Air Pollutants
2013 Radon Flux Measurement Program

White Mesa Mill
6425 South Highway 191
Blanding, Utah 84511

October 2013 Sampling Results
Cell 2

Prepared for: Energy Fuels Resources (USA) Inc.
6425 S. Highway 191
P.O. Box 809
Blanding, Utah 84511

Prepared by: Tellco Environmental
P.O. Box 3987
Grand Junction, Colorado 81502

TABLE OF CONTENTS

Page

1. INTRODUCTION 1
2. SITE HISTORY AND DESCRIPTION 1
3. REGULATORY REQUIREMENTS FOR THE SITE 2
4. SAMPLING METHODOLOGY 2
5. FIELD OPERATIONS 3
    5.1 Equipment Preparation 3
    5.2 Sample Locations, Identification, and Placement 3
    5.3 Sample Retrieval 3
    5.4 Environmental Conditions 4
6. SAMPLE ANALYSIS 4
    6.1 Apparatus 4
    6.2 Sample Inspection and Documentation 4
    6.3 Background and Sample Counting 5
7. QUALITY CONTROL (QC) AND DATA VALIDATION 5
    7.1 Sensitivity 5
    7.2 Precision 5
    7.3 Accuracy 6
    7.4 Completeness 6
8. CALCULATIONS 6
9. RESULTS 7
    9.1 Mean Radon Flux 7
    9.2 Site Results 8
References 9
Figure 1 10

Appendix A. Charcoal Canister Analyses Support Documents

Appendix B. Recount Data Analyses

Appendix C. Radon Flux Sample Laboratory Data, Including Blanks

Appendix D. Sample Locations Map (Figure 2)

1. INTRODUCTION

During October 07-08, 2013 Tellco Environmental, LLC (Tellco) of Grand Junction, Colorado, provided support to Energy Fuels Resources (USA) Inc. (Energy Fuels) to conduct radon flux measurements regarding the required National Emission Standards for Hazardous Air Pollutants (NESHAPs) Radon Flux Measurements. These measurements are required of Energy Fuels to show compliance with Federal Regulations (further discussed in Section 3 below). The standard is not an average per facility, but is an average per radon source. The standard allows mill owners or operators the option of either making a single set of measurements or making measurements over a one year period (e.g., weekly, monthly, or quarterly intervals).

Prior to 2012, Energy Fuels had chosen to make a single set of measurements to represent the radon flux each year; however, as the radon flux levels in Cell 2 began exceeding the regulatory standard of 20 picoCuries per square meter per second (pCi/m^2-s) in 2012, Energy Fuels decided to make the radon flux measurements on a more frequent basis. Energy Fuels is presently on a monthly radon flux sampling plan for Cell 2. This report presents the radon flux measurements results for Cell 2 for October 2013; the results of each monthly sampling event are presented in separate reports.

During June and July 2013, Energy Fuels placed additional cover materials at selected sample locations of Cell 2 in an attempt to reduce the radon flux levels. The additional material was approximately 18-24 inches thick and approximately 100 feet in diameter, centered around selected sample location points where previous sampling had identified radon flux greater than 40 pCi/m^2-s.

Tellco was contracted to provide radon canisters, equipment, and canister placement personnel as well as lab analysis of samples. Energy Fuels personnel provided support for loading and unloading charcoal from the canisters. This report details the procedures employed by Energy Fuels and Tellco to obtain the results presented in Section 9.0 of this report.

2. SITE DESCRIPTION

The White Mesa Mill facility is located in San Juan County in southeastern Utah, six miles south of Blanding, Utah. The mill began operations in 1980 for the purpose of extracting uranium and vanadium from feed stocks. Processing effluents from the operation are deposited in four lined cells, which vary in depth. Cell 1, Cell 4A, and Cell 4B did not require radon flux sampling, as explained in Section 3 below. Cell 3 sampling results are presented in separate reports.

Cell 2, which has a total area of approximately 270,624 square meters (m^2), has been filled and covered with interim cover. The Cell 2 cover region is the same size in 2013 as it was in 2012. This cell is comprised of one region, a soil cover of varying thickness, which requires NESHAPs radon flux monitoring. There were no apparent exposed tailings within Cell 2 at the time of the October 2013 sampling.

Cell 3, which has a total area of approximately 288,858 m^2, is nearly filled with tailings sand and is undergoing pre-closure activities. This cell is comprised of two source regions that require NESHAPs radon monitoring: a soil cover region of varying thickness and an exposed tailings "beaches" region.

The remaining area is covered by standing liquid in lower elevation areas. The sizes of the regions vary due to the continuing advancement of interim cover materials and varying water levels.

3. REGULATORY REQUIREMENTS FOR THE SITE

Radon emissions from the uranium mill tailings at this site are regulated by the State of Utah's Division of Radiation Control and administered by the Utah Division of Air Quality under generally applicable standards set by the Environmental Protection Agency (EPA) for Operating Mills. Applicable regulations are specified in 40 CFR Part 61, Subpart W, National Emission Standards for Radon Emissions from Operating Mill Tailings, with technical procedures in Appendix B. At present, there are no Subpart T uranium mill tailings at this site. These regulations are a subset of the NESHAPs. According to subsection 61.252 Standard, (a) radon-222 emissions to ambient air from an existing uranium mill tailings pile shall not exceed an average of 20 pCi/m^2-s for each pile or region. Subsection 61.253, Determining Compliance, states that: "Compliance with the emission standard in this subpart shall be determined annually through the use of Method 115 of Appendix B." Cell 1 is completely covered with standing liquid and therefore no radon flux measurements are required on Cell 1. The repaired Cell 4A, and newly constructed Cell 4B, were both constructed after December 15, 1989 and each was constructed with less than 40 acres surface area. Cell 4A and 4B comply with the requirements of 40 CFR 61.252(b), therefore no radon flux measurements are required on either Cell 4A or 4B.

4. SAMPLING METHODOLOGY

Radon emissions were measured using Large Area Activated Charcoal Canisters (canisters) in conformance with 40 CFR, Part 61, Appendix B, Method 115, Restrictions to Radon Flux Measurements, (EPA, 2012). These are passive gas adsorption sampling devices used to determine the flux rate of radon-222 gas from a surface. The canisters were constructed using a 10-inch diameter PVC end cap containing a bed of 180 grams of activated, granular charcoal. The prepared charcoal was placed in the canisters on a support grid on top of a ½ inch thick layer of foam and secured with a retaining ring under 1½ inches of foam (see Figure 1, page 10).

One hundred sampling locations were distributed throughout Cell 2 (consisting of one region) as depicted on the Sample Locations Map (see Figure 2, Appendix D). Each charged canister was placed directly onto the surface (open face down) and exposed to the surface for 24 hours. Radon gas adsorbed onto the charcoal and the subsequent radioactive decay of the entrained radon resulted in radioactive lead-214 and bismuth-214. These radon progeny isotopes emit characteristic gamma photons that can be detected through gamma spectroscopy. The original total activity of the adsorbed radon was calculated from these gamma ray measurements using calibration factors derived from cross-calibration of standard sources containing known total activities of radium-226 with geometry identical to the counted samples and from the principles of radioactive decay.

After approximately 24 hours, the exposed charcoal was transferred to a sealed plastic sample container (to prevent radon loss and/or further exposure during transport), identified and labeled, and transported to the Tellco laboratory in Grand Junction, Colorado for analysis. Upon completion of on-site activities, the field equipment was alpha and beta-gamma scanned for possible contamination resulting from fieldwork activities. All field equipment was surveyed by Energy Fuels Radiation Safety personnel and released for unrestricted use. Tellco personnel maintained custody of the samples from collection through analysis.

5. FIELD OPERATIONS

5.1 Equipment Preparation

All charcoal was dried at 110°C before use in the field. Unused charcoal and recycled charcoal were treated the same. 180-gram aliquots of dried charcoal were weighed and placed in sample containers.

Proper balance operation was verified daily by checking a standard weight. The balance readout agreed with the known standard weight to within ± 0.1 percent.

After acceptable balance check, empty containers were individually placed on the balance and the scale was re-zeroed with the container on the balance. Unexposed and dried charcoal was carefully added to the container until the readout registered 180 grams. The lid was immediately placed on the container and sealed with plastic tape. The balance was checked for readout drift between readings.

Sealed containers with unexposed charcoal were placed individually in the shielded counting well, with the bottom of the container centered over the detector, and the background count rate was documented. Three five-minute background counts were conducted on ten percent of the containers, selected at random to represent the "batch". If the background counts were too high to achieve an acceptable lower limit of detection (LLD), the entire charcoal batch was labeled non-conforming and recycled through the heating/drying process.

5.2 Sample Locations, Identification, and Placement

On October 07, 2013 100 sampling locations were spread out throughout the Cell 2 covered region. The same sampling locations that were established for the previous sampling of Cell 2 were used for this October 2013 sampling, although the actual sample identification numbers (IDs) are different. An individual ID was assigned to each sample point, using a sequential alphanumeric system indicating the charcoal batch and physical location within the region (e.g., N01…N100). This ID was written on an adhesive label and affixed to the top of the canister. The sample ID, date, and time of placement were recorded on the radon flux measurements data sheets for the set of one hundred measurements.

Prior to placing a canister at each sample location, the retaining ring, screen, and foam pad of each canister were removed to expose the charcoal support grid. A pre-measured charcoal charge was selected from a batch, opened and distributed evenly across the support grid. The canister was then reassembled and placed face down on the surface at each sampling location. Care was exercised not to push the device into the soil surface. The canister rim was "sealed" to the surface using a berm of local borrow material. Sample ID "N94" was offset approximately 20 feet west because there was a puddle of water at the actual location marker.

Five canisters (blanks) were similarly processed and the canisters were kept inside an airtight plastic bag during the 24-hour testing period.

5.3 Sample Retrieval

On October 08, 2013 at the end of the 24-hour testing period, all canisters were retrieved, disassembled and each charcoal sample was individually poured through a funnel into a container. Identification numbers were transferred to the appropriate container, which was sealed and placed in a

box for transport. Retrieval date and time were recorded on the same data sheets as the sample placement information. The blank samples were similarly processed.

All 100 charcoal samples from Cell 2 covered region were successfully containerized during the unloading process.

Tellco personnel maintained custody of the samples from collection through lab analysis.

5.4 Environmental Conditions

A rain gauge and thermometer were placed between Cell 2 and Cell 3 to monitor rainfall and air temperatures during sampling in order to ensure compliance with the regulatory measurement criteria.

In accordance with 40 CFR, Part 61, Appendix B, Method 115:

- Measurements were not initiated within 24 hours of rainfall.
- There was no rainfall after the placement of the canisters.
- The minimum ambient air temperature during the sampling period was 41 degrees F.

6. SAMPLE ANALYSIS

6.1 Apparatus

Apparatus used for the analysis:

- Single- or multi-channel pulse height analysis system, Ludlum Model 2200 with a Teledyne 3" x 3" sodium iodide, thallium-activated (NaI(Tl)) detector.
- Lead shielded counting well approximately 40 cm deep with 5-cm thick lead walls and a 7-cm thick base and 5 cm thick top.
- National Institute of Standards and Technology (NIST) traceable aqueous solution radium-226 absorbed onto 180 grams of activated charcoal.
- Ohaus Model C501 balance with 0.1-gram sensitivity.

6.2 Sample Inspection and Documentation

Once in the laboratory, the integrity of each charcoal container was verified by visual inspection of the plastic container. Laboratory personnel checked for damaged or unsealed containers and verified that the data sheet was complete.

All of the 100 sample containers and 5 blank containers received and inspected at the Tellco analytical laboratory were verified as valid and no damaged or unsealed containers were observed. Two of the containers, however, were both labeled "N16" and there was no sample labeled "N26", so one of the two samples labeled as "N16" was relabeled as "N26".

6.3 Background and Sample Counting

The gamma ray counting system was checked daily, including background and radium-226 source measurements prior to and after each counting session. Based on calibration statistics, using two sources with known radium-226 content, background and source control limits were established for each Ludlum/Teledyne counting system with shielded well (see Appendix A).

Gamma ray counting of exposed charcoal samples included the following steps:

- The length of count time was determined by the activity of the sample being analyzed, according to a data quality objective of a minimum of 1,000 accrued counts for any given sample.
- The sample container was centered on the NaI detector and the shielded well door was closed.
- The sample was counted over a determined count length and then the mid-sample count time, date, and gross counts were documented on the radon flux measurements data sheet and used in the calculations.
- The above steps were repeated for each exposed charcoal sample.
- Approximately 10 percent of the containers counted were selected for recounting. These containers were recounted on the next day following the original count.

7. QUALITY CONTROL (QC) AND DATA VALIDATION

Charcoal flux measurement QC samples included the following intra-laboratory analytical frequency objectives:

- Blanks, 5 percent, and
- Recounts, 10 percent

All sample data were subjected to validation protocols that included assessments of sensitivity, precision, accuracy, and completeness. All method-required data quality objectives (EPA, 2012) were attained.

7.1 Sensitivity

A total of five blanks were analyzed by measuring the radon progeny activity in samples subjected to all aspects of the measurement process, excepting exposure to the source region. These blank sample measurements comprised approximately 5 percent of the field measurements. Each of the five blank samples measured the same radon flux rate of 0.01 pCi/m^2-s. The lower limit of detection (LLD) was approximately 0.03 pCi/m^2-s.

7.2 Precision

Ten recount measurements, distributed throughout the sample set, were performed by replicating analyses of individual field samples (see Appendix B). These recount measurements comprised approximately 10 percent of the total number of samples analyzed. The precision of all recount

measurements, expressed as relative percent difference (RPD), ranged from less than 0.1 percent to 6.0 percent with an overall average precision of approximately 2.3 percent RPD.

7.3 Accuracy

Accuracy of field measurements was assessed daily by counting two laboratory control samples with known Ra-226 content. Accuracy of these lab control sample measurements, expressed as percent bias, ranged from approximately -2.6 percent to -0.4 percent. The arithmetic average bias of the lab control sample measurements was approximately -1.2 percent (see Appendix A).

7.4 Completeness

All 100 of the samples from the Cell 2 cover region were verified, representing 100 percent completeness for the October 2013 radon flux sampling.

8. CALCULATIONS

Radon flux rates were calculated for charcoal collection samples using calibration factors derived from cross-calibration to sources with known total activity with identical geometry as the charcoal containers. A yield efficiency factor was used to calculate the total activity of the sample charcoal containers. Individual field sample result values presented were not reduced by the results of the field blank analyses.

In practice, radon flux rates were calculated by a database computer program. The algorithms utilized by the data base program were as follows:

Equation 8.1:

$$\text{pCi Rn-222/m}^2\text{sec} = \frac{N}{[Ts*A*b*0.5^{(d/91.75)}]}$$

where: N = net sample count rate, cpm under 220-662 keV peak
Ts = sample duration, seconds
b = instrument calibration factor, cpm per pCi; values used:
0.1699, for M-01/D-21 and
0.1702, for M-02/D-20
d = decay time, elapsed hours between sample mid-time and count mid-time
A = area of the canister, m^2

Equation 8.2:

$$\text{Error}, 2\sigma = 2 \times \frac{\sqrt{\frac{\text{Gross Sample, cpm}}{\text{Sample Count, t, min}} + \frac{\text{Background Sample, cpm}}{\text{Background Count, t, min}}}}{\text{Net, cpm}} \times \text{Sample Concentration}$$

Equation 8.3:

$$LLD = \frac{2.71 + (4.65)(S_b)}{[Ts*A*b*0.5^{(d/9)/75)}]}$$

where: 2.71 = constant
4.65 = confidence interval factor
S_b = standard deviation of the background count rate
Ts = sample duration, seconds
b = instrument calibration factor, cpm per pCi; values used:
0.1699, for M-01/D-21 and
0.1702, for M-02/D-20
d = decay time, elapsed hours between sample mid-time and count mid-time
A = area of the canister, m^2

9. RESULTS

9.1 Mean Radon Flux

Referencing 40 CFR, Part 61, Subpart W, Appendix B, Method 115 - Monitoring for Radon-222 Emissions, Subsection 2.1.7 - Calculations, "the mean radon flux for each region of the pile and for the total pile shall be calculated and reported as follows:

(a) The individual radon flux calculations shall be made as provided in Appendix A EPA 86(1). The mean radon flux for each region of the pile shall be calculated by summing all individual flux measurements for the region and dividing by the total number of flux measurements for the region.

(b) The mean radon flux for the total uranium mill tailings pile shall be calculated as follows:

$$J_s = \frac{J_1A_1 + \ldots J_2A_2 [+] \ldots J_iA_i}{A_t}$$

Where: J_s = Mean flux for the total pile (pCi/m^2-s)
J_i = Mean flux measured in region i (pCi/m^2-s)
A_i = Area of region i (m^2)
A_t = Total area of the pile (m^2)"

40 CFR 61, Subpart W, Appendix B, Method 115, Subsection 2.1.8, Reporting states "The results of individual flux measurements, the approximate locations on the pile, and the mean radon flux for each region and the mean radon flux for the total stack [pile] shall be included in the emission test report. Any condition or unusual event that occurred during the measurements that could significantly affect the results should be reported."

9.2 Site Results

Site Specific Sample Results (reference Appendix C)

(a) The mean radon flux for the Cell 2 region at the site is as follows:

Cell 2 - Cover Region = 19.0 pCi/m^2-s (based on 270,624 m^2 area)

Note: Reference Appendix C of this report for the entire summary of individual measurement results.

(b) Using the data presented above, the calculated mean radon flux for Cell 2 is as follows:

Cell 2 = 19.0 pCi/m^2-s

$$\frac{(19.0)(270,624)}{270,624} = 19.0$$

As shown above, the arithmetic mean radon flux of the October 2013 samples for Cell 2 at Energy Fuels White Mesa milling facility is below the NRC and EPA standard of 20 pCi/m^2-s.

For the past several years, the site has been experiencing drought conditions, which were especially severe during 2012 and the first half of 2013. The result of this dry weather is likely a lowering of the moisture levels in the buried tailings and cover materials, leading to increased radon flux rates at the site. There were a few intense storms in September 2013, which produced very heavy rain downpours and flash flooding at Cell 2, with water running off or standing on the surface cover material. The October 2013 (as well as the September 2013) sampling results for Cell 2 are significantly lower than the August 2013 average of approximately 30.2 pCi/m^2-s.

Appendix C presents the summary of individual measurement results, including blank sample analysis.

Sample locations are depicted on Figure 2, which is included in Appendix D. The map was produced by Tellco.

References

U. S. Environmental Protection Agency, *Radon Flux Measurements on Gardinier and Royster Phosphogypsum Piles Near Tampa and Mulberry, Florida*, EPA 520/5-85-029, NTIS #PB86-161874, January 1986.

U. S. Environmental Protection Agency. *Title 40, Code of Federal Regulations*, July 2012.

U. S. Nuclear Regulatory Commission, *Radiological Effluent and Environmental Monitoring at Uranium Mills*, Regulatory Guide 4.14, April 1980.

U. S. Nuclear Regulatory Commission, *Title 10, Code of Federal Regulations*, Part 40, Appendix A, January 2013.

Figure 1

Large Area Activated Charcoal Canisters Diagram

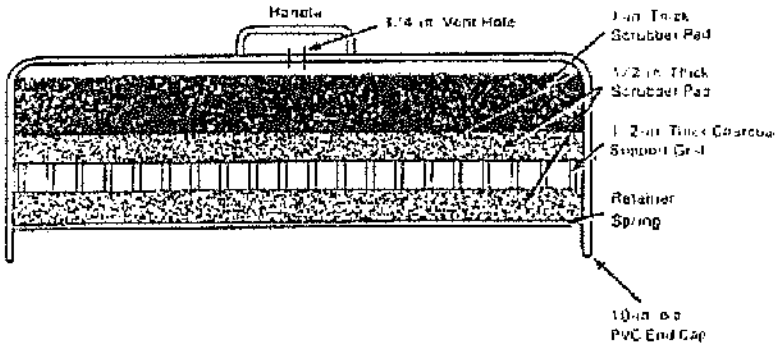


FIGURE 1 Large-Area Radon Collector

Appendix A

Charcoal Canister Analyses Support Documents

ACCURACY APPRAISAL TABLE
OCTOBER 2013 SAMPLING

ENERGY FUELS RESOURCES (USA) INC.
WHITE MESA MILL, BLANDING, UTAH
2013 NESHAPs RADON FLUX MEASUREMENTS
CELL 2
SAMPLING DATES: 10/07/13-10/08/13

SYSTEM I.D.	DATE	Bkg Counts (1 min. each)			Source Counts (1 min. each)			AVG NET	YIELD	FOUND	SOURCE	KNOWN	% BIAS
		#1	#2	#3	#1	#2	#3	cpm	cpm/pCi	pCi	ID	pCi	
M-01/D-21	10/9/2013	141	125	113	9890	10037	9881	9810	0.1699	57738	GS-04	59300	-2.6%
M-01/D-21	10/9/2013	130	129	116	10200	10286	9987	10033	0.1699	59050	GS-04	59300	-0.4%
M-01/D-21	10/10/2013	118	136	114	9934	10095	10089	9917	0.1699	58368	GS-04	59300	-1.6%
M-01/D-21	10/10/2013	119	123	118	10016	10175	10097	9976	0.1699	58717	GS-04	59300	-1.0%
M-01/D-21	10/9/2013	141	125	113	9998	10159	10215	9998	0.1699	58844	GS-05	59300	-0.8%
M-01/D-21	10/9/2013	130	129	116	10122	10033	10003	9928	0.1699	58432	GS-05	59300	-1.5%
M-01/D-21	10/10/2013	118	136	114	10000	10155	10234	10007	0.1699	58899	GS-05	59300	-0.7%
M-01/D-21	10/10/2013	119	123	118	10059	10082	10125	9969	0.1699	58674	GS-05	59300	-1.1%
M-02/D-20	10/9/2013	124	103	118	10111	9962	9985	9904	0.1702	58192	GS-04	59300	-1.9%
M-02/D-20	10/9/2013	119	116	137	10131	10125	10075	9986	0.1702	58674	GS-04	59300	-1.1%
M-02/D-20	10/10/2013	115	120	106	10031	10175	10257	10041	0.1702	58993	GS-04	59300	-0.5%
M-02/D-20	10/10/2013	120	126	137	10132	10073	9983	9935	0.1702	58373	GS-04	59300	-1.6%
M-02/D-20	10/9/2013	124	103	118	10073	10087	10052	9956	0.1702	58494	GS-05	59300	-1.4%
M-02/D-20	10/9/2013	119	116	137	10133	10063	9994	9939	0.1702	58398	GS-05	59300	-1.5%
M-02/D-20	10/10/2013	115	120	106	10166	10230	10070	10042	0.1702	58999	GS-05	59300	-0.5%
M-02/D-20	10/10/2013	120	126	137	10115	10159	10218	10036	0.1702	58968	GS-05	59300	-0.6%
										AVERAGE PERCENT BIAS FOR ALL ANALYTICAL SESSIONS:			-1.2%

CHARCOAL CANISTER ANALYSIS SYSTEM

SITE LOCATION: White Mesa Mill, Blanding, UT

CLIENT: Energy Fuels Resources (USA)

Calibration Check Log

System ID: M-01/D-21 Calibration Date: 6/14/13 Due Date: 6/14/14

Scaler S/N: 51572 High Voltage: 1025 Window: 4.42 Thrshld: 2.20

Detector S/N: 041533 Source ID/SN: Ra^{226}/GS-04 Source Activity: 59.3 KpCi

Blank Canister Bkgd. Range, cpm: 2 σ = 86 to 154 3 σ = 69 to 171

Gross Source Range, cpm: 2 σ = 9823 to 10547 3 σ = 9642 to 10728

Technician: DL Cope

All counts times are one minute.

	Date	By	Background Counts (1 min. each)				Source Counts (1 min. each)				ok?
			#1	#2	#3	Avg.	#1	#2	#3	Average	Y/N
Pre	10/9/13	DLCope	141	125	113	126	9890	10037	9881	9936	Y
Post	10/9/13	DLCope	130	129	116	125	10200	10286	9987	10158	Y
Pre	10/10/13	DLCope	118	136	114	123	9934	10095	10089	10039	Y
Post	10/10/13	DLCope	119	123	118	120	10016	10175	10097	10096	Y

Y/N: Y = average background and source cpm falls within the control limits.
N = average background and source cpm does not fall within the control limits.

The acceptable ranges were determined from prior background and source check data.

CHARCOAL CANISTER ANALYSIS SYSTEM

SITE LOCATION: White Mesa Mill, Blanding, UT

CLIENT: Energy Fuels Resources (USA)

Calibration Check Log

System ID: M-01/D-21 Calibration Date: 6/14/13 Due Date: 6/14/14

Scaler S/N: 51572 High Voltage: 1025 Window: 4.42 Thrshld: 2.20

Detector S/N: 041533 Source ID/SN: Ra^{226}/GS-05 Source Activity: 59.3kpC

Blank Canister Bkgd. Range, cpm: 2 σ = 86 to 154 3 σ = 69 to 171

Gross Source Range, cpm: 2 σ = 9895 to 10516 3 σ = 9740 to 10671

Technician: DL Cox

All counts times are one minute.

	Date	By	Background Counts (1 min. each)				Source Counts (1 min. each)				ok?
			#1	#2	#3	Avg.	#1	#2	#3	Average	Y/N
Pre	10/9/13	DLCox	141	125	113	126	9998	10159	10215	10124	Y
Post	10/9/13	DLCox	130	129	116	125	10122	10033	10003	10053	Y
Pre	10/10/13	DLCox	118	136	114	123	10000	10155	10234	10130	Y
Post	10/10/13	DLCox	119	123	118	120	10059	10082	10125	10089	Y

Y/N: Y = average background and source cpm falls within the control limits.
N = average background and source cpm does not fall within the control limits.

The acceptable ranges were determined from prior background and source check data.

CHARCOAL CANISTER ANALYSIS SYSTEM

SITE LOCATION: White Mesa Mill, Blanding, UT

CLIENT: Energy Fuels Resources (USA)

Calibration Check Log

System ID: M-02/D-20 Calibration Date: 6/14/13 Due Date: 6/14/14

Scaler S/N: 51563 High Voltage: 1025 Window: 4.42 Thrshld: 2.20

Detector S/N: 041532 Source ID/SN: Ra^{226}/GS-04 Source Activity: 59.3 KpC

Blank Canister Bkgd. Range, cpm: 2 σ = 78 to 151 3 σ = 60 to 170

Gross Source Range, cpm: 2 σ = 9959 to 10527 3 σ = 9817 to 10669

Technician: DZ Logs

All counts times are one minute.

	Date	By	Background Counts (1 min. each)				Source Counts (1 min. each)				ok?
			#1	#2	#3	Avg.	#1	#2	#3	Average	Y/N
Pre	10/9/13	DLogs	124	103	118	115	10111	9962	9985	10019	Y
Post	10/9/13	DLogs	119	116	137	124	10131	10125	10075	10110	Y
Pre	10/10/13	DLogs	115	120	106	114	10031	10175	10257	10154	Y
Post	10/10/13	DLogs	120	126	137	128	10132	10073	9983	10063	Y

Y/N: Y = average background and source cpm falls within the control limits.
N = average background and source cpm does not fall within the control limits.

The acceptable ranges were determined from prior background and source check data.

CHARCOAL CANISTER ANALYSIS SYSTEM

SITE LOCATION: White Mesa Mill, Blanding, UT

CLIENT: Energy Fuels Resources (USA)

Calibration Check Log

System ID: M-02/ D-20 Calibration Date: 6/14/13 Due Date: 6/14/14

Scaler S/N: 51563 High Voltage: 1025 Window: 4.42 Thrshld: 2.20

Detector S/N: 041532 Source ID/SN: Ra^{226}/GS-05 Source Activity: 59.3 KpC;

Blank Canister Bkgd. Range, cpm: 2 σ = 78 to 151 3 σ = 60 to 170

Gross Source Range, cpm: 2 σ = 9846 to 10498 3 σ = 9683 to 10661

Technician: D L Cox

All counts times are one minute.

	Date	By	Background Counts (1 min. each)				Source Counts (1 min. each)				ok?
			#1	#2	#3	Avg.	#1	#2	#3	Average	Y/N
Pre	10/9/13	DLCox	124	103	118	115	10073	10087	10052	10071	Y
Post	10/9/13	DLCox	119	116	137	124	10133	10063	9994	10063	Y
Pre	10/10/13	DLCox	115	120	106	114	10166	10230	10070	10155	Y
Post	10/10/13	DLCox	120	126	137	128	10115	10159	10218	10164	Y

Y/N: Y = average background and source cpm falls within the control limits.
N = average background and source cpm does not fall within the control limits.

The acceptable ranges were determined from prior background and source check data.

BALANCE OPERATION DAILY CHECK

Balance Model: Ohaus Port-o-gram SN: 12307

Standard Weight (g): 200.0

Date	Pre-check (g)	Post-check (g)	O.K. ± 0.1 % ?	By
10/9/13	200.0	200.0	yes	D Moyer
10/10/13	200.0	200.0	yes	D L Cox

Appendix B

Recount Data Analyses

CLIENT: ENERGY FUELS RESOURCES PROJECT: RADON FLUX MEASUREMENTS, WHITE MESA MILL PROJECT NO.: 13004.00

PILE: 2 BATCH: N SURFACE: SOIL AIR TEMP MIN: 41°F WEATHER: NO RAIN
AREA: COVER DEPLOYED: 10 7 13 RETRIEVED: 10 8 13 CHARCOAL BKG: 154 cpm Wt. Out: 180.0 g.
FIELD TECHNICIANS: CS,DLC COUNTED BY: DLC DATA ENTRY BY: DLC TARE WEIGHT: 29.2 g.
COUNTING SYSTEM I.D.: M01/D21, M02/D20 CAL. DUE: 6/14/14

GRID LOCATION	SAMPLE I. D.	RETRIV HR	RETRIV MIN	ANALYSIS MO	ANALYSIS DA	ANALYSIS YR	MID-TIME HR	MID-TIME MIN	CNT (MIN)	GROSS COUNTS	GROSS WT IN	RADON pCi/m²s	± pCi/m²s	LLD pCi/m²s	PRECISION % RPD
N10	N10	8	17	10	9	13	11	40	1	15288	222.3	25.9	2.6	0.03	
RECOUNT	N10	8	17	10	10	13	11	36	1	13081	222.3	26.6	2.7	0.04	2.7%
N20	N20	8	37	10	9	13	11	48	1	18630	217.9	31.8	3.2	0.03	
RECOUNT	N20	8	37	10	10	13	11	36	1	15293	217.9	31.2	3.1	0.04	1.9%
N30	N30	9	1	10	9	13	11	55	1	9585	222.6	16.3	1.6	0.03	
RECOUNT	N30	9	1	10	10	13	11	37	1	8513	222.6	17.3	1.7	0.04	6.0%
N40	N40	9	22	10	9	13	12	3	1	1017	226.1	1.5	0.2	0.03	
RECOUNT	N40	9	22	10	10	13	12	38	2	1694	226.1	1.5	0.2	0.04	0.0%
N50	N50	9	39	10	9	13	12	12	1	26059	222.5	45.3	4.5	0.03	
RECOUNT	N50	9	39	10	10	13	12	40	1	22223	222.5	46.5	4.7	0.04	2.6%
N60	N60	9	56	10	9	13	12	19	1	15361	221.7	26.6	2.7	0.03	
RECOUNT	N60	9	56	10	10	13	12	40	1	13127	221.7	27.3	2.7	0.04	2.6%
N70	N70	10	12	10	9	13	12	27	1	4127	219.2	7.0	0.7	0.03	
RECOUNT	N70	10	12	10	10	13	12	42	1	3558	219.2	7.2	0.7	0.04	2.8%
N80	N80	10	30	10	9	13	12	37	1	1462	220.9	2.3	0.2	0.03	
RECOUNT	N80	10	30	10	10	13	12	42	1	1202	220.9	2.2	0.2	0.04	4.4%
N90	N90	10	47	10	9	13	12	44	1	1523	222.9	2.4	0.2	0.03	
RECOUNT	N90	10	47	10	10	13	12	44	1	1303	222.9	2.4	0.2	0.04	0.0%
N100	N100	11	2	10	9	13	12	55	1	1064	219.2	1.6	0.2	0.03	
RECOUNT	N100	11	2	10	10	13	12	45	2	1841	219.2	1.6	0.2	0.04	0.0%
														AVERAGE PERCENT PRECISION FOR THE CELL 2 COVER REGION:	2.3%

Appendix C

Radon Flux Sample Laboratory Data (including Blanks)

CLIENT: ENERGY FUELS RESOURCES PROJECT: RADON FLUX MEASUREMENTS, WHITE MESA MILL PROJECT NO.: 13004.00

PILE: 2 BATCH: N SURFACE: SOIL AIR TEMP MIN: 41°F WEATHER: NO RAIN
AREA: COVER DEPLOYED: 10 7 13 RETRIEVED: 10 8 13 CHARCOAL BKG: 154 cpm Wt. Out: 180.0 g.
FIELD TECHNICIANS: CS,DLC COUNTED BY: DLC DATA ENTRY BY: DLC TARE WEIGHT: 29.2 g.
COUNTING SYSTEM I.D.: M01/D21, M02/D20 CAL. DUE: 6/14/14

GRID LOCATION	SAMPLE I. D.	DEPLOY HR	DEPLOY MIN	RETRIV HR	RETRIV MIN	ANALYSIS MO	ANALYSIS DA	ANALYSIS YR	MID-TIME HR	MID-TIME MIN	CNT (MIN)	GROSS COUNTS	GROSS WT IN	RADON pCi/m²s	± pCi/m²s	LLD pCi/m²s	COMMENTS:
N01	N01	8	1	8	30	10	9	13	11	34	1	1648	222.7	2.6	0.3	0.03	
N02	N02	8	3	8	31	10	9	13	11	34	1	4371	221.1	7.2	0.7	0.03	
N03	N03	8	5	8	32	10	9	13	11	35	1	3427	219.8	5.6	0.6	0.03	
N04	N04	8	7	8	33	10	9	13	11	35	1	20619	219.3	35.0	3.5	0.03	
N05	N05	8	9	8	34	10	9	13	11	38	2	1146	222.4	0.7	0.1	0.03	
N06	N06	8	11	8	35	10	9	13	11	37	1	1005	221.7	1.5	0.1	0.03	
N07	N07	8	13	8	36	10	9	13	11	39	1	2363	225.6	3.8	0.4	0.03	
N08	N08	8	15	8	37	10	9	13	11	39	1	10020	214.3	16.9	1.7	0.03	
N09	N09	8	16	8	38	10	9	13	11	40	1	1677	227.3	2.6	0.3	0.03	
N10	N10	8	17	8	39	10	9	13	11	40	1	15288	222.3	25.9	2.6	0.03	
N11	N11	8	19	8	40	10	9	13	11	42	1	8718	222.1	14.7	1.5	0.03	
N12	N12	8	21	8	41	10	9	13	11	42	1	41086	220.9	70.2	7.0	0.03	
N13	N13	8	23	8	42	10	9	13	11	43	1	14778	224.8	25.1	2.5	0.03	
N14	N14	8	25	8	43	10	9	13	11	43	1	9904	225.7	16.7	1.7	0.03	
N15	N15	8	27	8	44	10	9	13	11	45	1	3592	220.8	5.9	0.6	0.03	
N16	N16	8	29	8	45	10	9	13	11	45	1	2742	224.2	4.4	0.4	0.03	
N17	N17	8	31	8	46	10	9	13	11	46	1	9400	227.0	15.9	1.6	0.03	
N18	N18	8	33	8	47	10	9	13	11	46	1	6196	220.0	10.4	1.0	0.03	
N19	N19	8	35	8	48	10	9	13	11	48	1	11346	221.2	19.3	1.9	0.03	
N20	N20	8	37	8	49	10	9	13	11	48	1	18630	217.9	31.8	3.2	0.03	
N21	N21	8	39	8	50	10	9	13	11	49	1	10300	216.7	17.5	1.8	0.03	
N22	N22	8	44	8	51	10	9	13	11	49	1	22240	222.7	38.2	3.8	0.03	
N23	N23	8	46	8	52	10	9	13	11	51	1	14572	223.3	25.0	2.5	0.03	
N24	N24	8	48	8	53	10	9	13	11	51	1	7246	221.9	12.3	1.2	0.03	
N25	N25	8	50	8	54	10	9	13	11	52	1	39919	220.5	69.0	6.9	0.03	
N26	N26	8	53	8	59	10	9	13	11	52	1	3104	222.1	5.1	0.5	0.03	"N16"
N27	N27	8	55	9	0	10	9	13	11	54	1	16149	221.6	27.7	2.8	0.03	
N28	N28	8	57	9	1	10	9	13	11	54	1	9260	219.6	15.8	1.6	0.03	
N29	N29	8	59	9	2	10	9	13	11	55	1	37426	224.6	64.6	6.5	0.03	
N30	N30	9	1	9	3	10	9	13	11	55	1	9585	222.6	16.3	1.6	0.03	
N31	N31	9	3	9	4	10	9	13	11	57	1	12092	223.7	20.7	2.1	0.03	
N32	N32	9	5	9	5	10	9	13	11	57	1	13585	218.1	23.3	2.3	0.03	
N33	N33	9	7	9	6	10	9	13	11	58	1	2361	225.0	3.8	0.4	0.03	
N34	N34	9	9	9	7	10	9	13	11	58	1	3485	224.8	5.8	0.6	0.03	
N35	N35	9	11	9	8	10	9	13	12	0	1	16688	218.8	28.8	2.9	0.03	
N36	N36	9	13	9	9	10	9	13	12	0	1	26590	224.2	46.0	4.6	0.03	
N37	N37	9	15	9	10	10	9	13	12	1	1	9492	220.4	16.3	1.6	0.03	

CLIENT: ENERGY FUELS RESOURCES PROJECT: RADON FLUX MEASUREMENTS, WHITE MESA MILL PROJECT NO.: 13004.00

PILE: 2 BATCH: N SURFACE: SOIL AIR TEMP MIN: 41°F WEATHER: NO RAIN
AREA: COVER DEPLOYED: 10 7 13 RETRIEVED: 10 8 13 CHARCOAL BKG: 154 cpm Wt. Out: 180.0 g.
FIELD TECHNICIANS: CS,DLC COUNTED BY: DLC DATA ENTRY BY: DLC TARE WEIGHT: 29.2 g.
COUNTING SYSTEM I.D.: M01/D21, M02/D20 CAL. DUE: 6/14/14

GRID LOCATION	SAMPLE I. D.	DEPLOY HR	DEPLOY MIN	RETRIV HR	RETRIV MIN	ANALYSIS MO	ANALYSIS DA	ANALYSIS YR	MID-TIME HR	MID-TIME MIN	CNT (MIN)	GROSS COUNTS	GROSS WT IN	RADON pCi/m²s	± pCi/m²s	LLD pCi/m²s	COMMENTS:
N38	N38	9	18	9	11	10	9	13	12	1	1	1220	223.2	1.9	0.2	0.03	
N39	N39	9	20	9	12	10	9	13	12	3	1	38715	219.6	67.3	6.7	0.03	
N40	N40	9	22	9	13	10	9	13	12	3	1	1017	226.1	1.5	0.2	0.03	
N41	N41	9	24	9	14	10	9	13	12	4	1	2155	222.9	3.5	0.3	0.03	
N42	N42	9	26	9	15	10	9	13	12	5	2	1411	218.2	1.0	0.1	0.03	
N43	N43	9	28	9	16	10	9	13	12	7	2	1138	223.8	0.7	0.1	0.03	
N44	N44	9	29	9	17	10	9	13	12	7	1	23438	224.5	40.7	4.1	0.03	
N45	N45	9	31	9	18	10	9	13	12	9	1	68251	225.3	119.3	11.9	0.03	
N46	N46	9	33	9	22	10	9	13	12	9	1	4572	223.4	7.7	0.8	0.03	
N47	N47	9	35	9	23	10	9	13	12	10	1	30299	220.7	52.7	5.3	0.03	
N48	N48	9	36	9	24	10	9	13	12	10	1	32867	220.6	57.1	5.7	0.03	
N49	N49	9	38	9	25	10	9	13	12	12	1	12843	220.5	22.2	2.2	0.03	
N50	N50	9	39	9	26	10	9	13	12	12	1	26059	222.5	45.3	4.5	0.03	
N51	N51	9	40	9	27	10	9	13	12	13	1	8546	217.6	14.7	1.5	0.03	
N52	N52	9	42	9	28	10	9	13	12	13	1	11390	218.6	19.6	2.0	0.03	
N53	N53	9	44	9	29	10	9	13	12	15	1	3358	216.7	5.6	0.6	0.03	
N54	N54	9	45	9	30	10	9	13	12	15	1	15407	223.9	26.7	2.7	0.03	
N55	N55	9	47	9	31	10	9	13	12	16	1	6567	216.6	11.2	1.1	0.03	
N56	N56	9	49	9	35	10	9	13	12	16	1	48135	219.6	83.8	8.4	0.03	
N57	N57	9	51	9	36	10	9	13	12	18	1	23851	222.2	41.5	4.2	0.03	
N58	N58	9	53	9	37	10	9	13	12	18	1	11718	219.6	20.2	2.0	0.03	
N59	N59	9	55	9	38	10	9	13	12	19	1	6485	218.4	11.1	1.1	0.03	
N60	N60	9	56	9	39	10	9	13	12	19	1	15361	221.7	26.6	2.7	0.03	
N61	N61	9	59	9	40	10	9	13	12	21	1	4127	225.5	7.0	0.7	0.03	
N62	N62	10	0	9	41	10	9	13	12	21	1	6127	223.5	10.5	1.0	0.03	
N63	N63	10	2	9	42	10	9	13	12	22	1	3140	217.6	5.2	0.5	0.03	
N64	N64	10	3	9	43	10	9	13	12	22	1	35907	217.2	62.7	6.3	0.03	
N65	N65	10	5	9	44	10	9	13	12	24	1	17294	220.6	30.1	3.0	0.03	
N66	N66	10	7	9	48	10	9	13	12	24	1	17676	225.2	30.7	3.1	0.03	
N67	N67	10	8	9	49	10	9	13	12	25	1	12076	213.8	20.9	2.1	0.03	
N68	N68	10	10	9	50	10	9	13	12	25	1	2203	218.0	3.6	0.4	0.03	
N69	N69	10	11	9	51	10	9	13	12	27	1	3999	221.7	6.8	0.7	0.03	
N70	N70	10	12	9	52	10	9	13	12	27	1	4127	219.2	7.0	0.7	0.03	
N71	N71	10	14	9	53	10	9	13	12	28	1	20204	222.4	35.2	3.5	0.03	
N72	N72	10	15	9	54	10	9	13	12	28	1	12266	220.8	21.2	2.1	0.03	
N73	N73	10	17	9	55	10	9	13	12	30	1	17301	221.3	30.1	3.0	0.03	
N74	N74	10	18	9	56	10	9	13	12	30	1	26557	222.0	46.3	4.6	0.03	

CLIENT: ENERGY FUELS RESOURCES PROJECT: RADON FLUX MEASUREMENTS, WHITE MESA MILL PROJECT NO.: 13004.00

PILE: 2 BATCH: N SURFACE: SOIL AIR TEMP MIN: 41°F WEATHER: NO RAIN
AREA: COVER DEPLOYED: 10 7 13 RETRIEVED: 10 8 13 CHARCOAL BKG: 154 cpm Wt. Out: 180.0 g.
FIELD TECHNICIANS: CS,DLC COUNTED BY: DLC DATA ENTRY BY: DLC TARE WEIGHT: 29.2 g.
COUNTING SYSTEM I.D.: M01/D21, M02/D20 CAL. DUE: 6/14/14

GRID LOCATION	SAMPLE I. D.	DEPLOY HR	DEPLOY MIN	RETRIV HR	RETRIV MIN	ANALYSIS MO	ANALYSIS DA	ANALYSIS YR	MID-TIME HR	MID-TIME MIN	CNT (MIN)	GROSS COUNTS	GROSS WT IN	RADON pCi/m²s	± pCi/m²s	LLD pCi/m²s	COMMENTS:
N75	N75	10	19	9	57	10	9	13	12	31	1	1601	217.2	2.5	0.3	0.03	
N76	N76	10	21	9	58	10	9	13	12	31	1	1282	223.3	2.0	0.2	0.03	
N77	N77	10	24	10	3	10	9	13	12	35	2	1233	219.4	0.8	0.1	0.03	
N78	N78	10	26	10	4	10	9	13	12	34	1	1370	220.0	2.1	0.2	0.03	
N79	N79	10	28	10	5	10	9	13	12	37	1	2251	224.7	3.7	0.4	0.03	
N80	N80	10	30	10	6	10	9	13	12	37	1	1462	220.9	2.3	0.2	0.03	
N81	N81	10	32	10	7	10	9	13	12	38	1	3684	215.1	6.2	0.6	0.03	
N82	N82	10	33	10	8	10	9	13	12	38	1	9626	218.1	16.6	1.7	0.03	
N83	N83	10	35	10	12	10	9	13	12	40	1	8168	218.9	14.1	1.4	0.03	
N84	N84	10	36	10	13	10	9	13	12	40	1	2111	221.4	3.4	0.3	0.03	
N85	N85	10	38	10	14	10	9	13	12	41	1	3075	218.6	5.1	0.5	0.03	
N86	N86	10	40	10	15	10	9	13	12	41	1	4069	221.2	6.9	0.7	0.03	
N87	N87	10	41	10	16	10	9	13	12	43	1	2381	219.1	3.9	0.4	0.03	
N88	N88	10	43	10	17	10	9	13	12	43	1	7741	219.7	13.3	1.3	0.03	
N89	N89	10	45	10	21	10	9	13	12	44	1	14060	217.5	24.4	2.4	0.03	
N90	N90	10	47	10	22	10	9	13	12	44	1	1523	222.9	2.4	0.2	0.03	
N91	N91	10	49	10	23	10	9	13	12	46	1	1561	216.4	2.5	0.2	0.03	
N92	N92	10	51	10	25	10	9	13	12	46	1	4163	222.6	7.0	0.7	0.03	
N93	N93	10	52	10	26	10	9	13	12	47	1	2663	222.2	4.4	0.4	0.03	
N94	N94	10	54	10	27	10	9	13	12	47	1	1304	222.9	2.0	0.2	0.03	20' W
N95	N95	10	56	10	28	10	9	13	12	50	2	1163	221.7	0.8	0.1	0.03	
N96	N96	10	58	10	29	10	9	13	12	51	3	1171	220.8	0.4	0.0	0.03	
N97	N97	10	59	10	30	10	9	13	12	53	1	7926	217.9	13.7	1.4	0.03	
N98	N98	11	0	10	31	10	9	13	12	53	1	2058	222.5	3.4	0.3	0.03	
N99	N99	11	1	10	32	10	9	13	12	56	3	1191	225.3	0.4	0.0	0.03	
N100	N100	11	2	10	33	10	9	13	12	55	1	1064	219.2	1.6	0.2	0.03	
													AVERAGE RADON FLUX RATE FOR THE CELL 2 COVER REGION:	19.0	pCi/m²s		

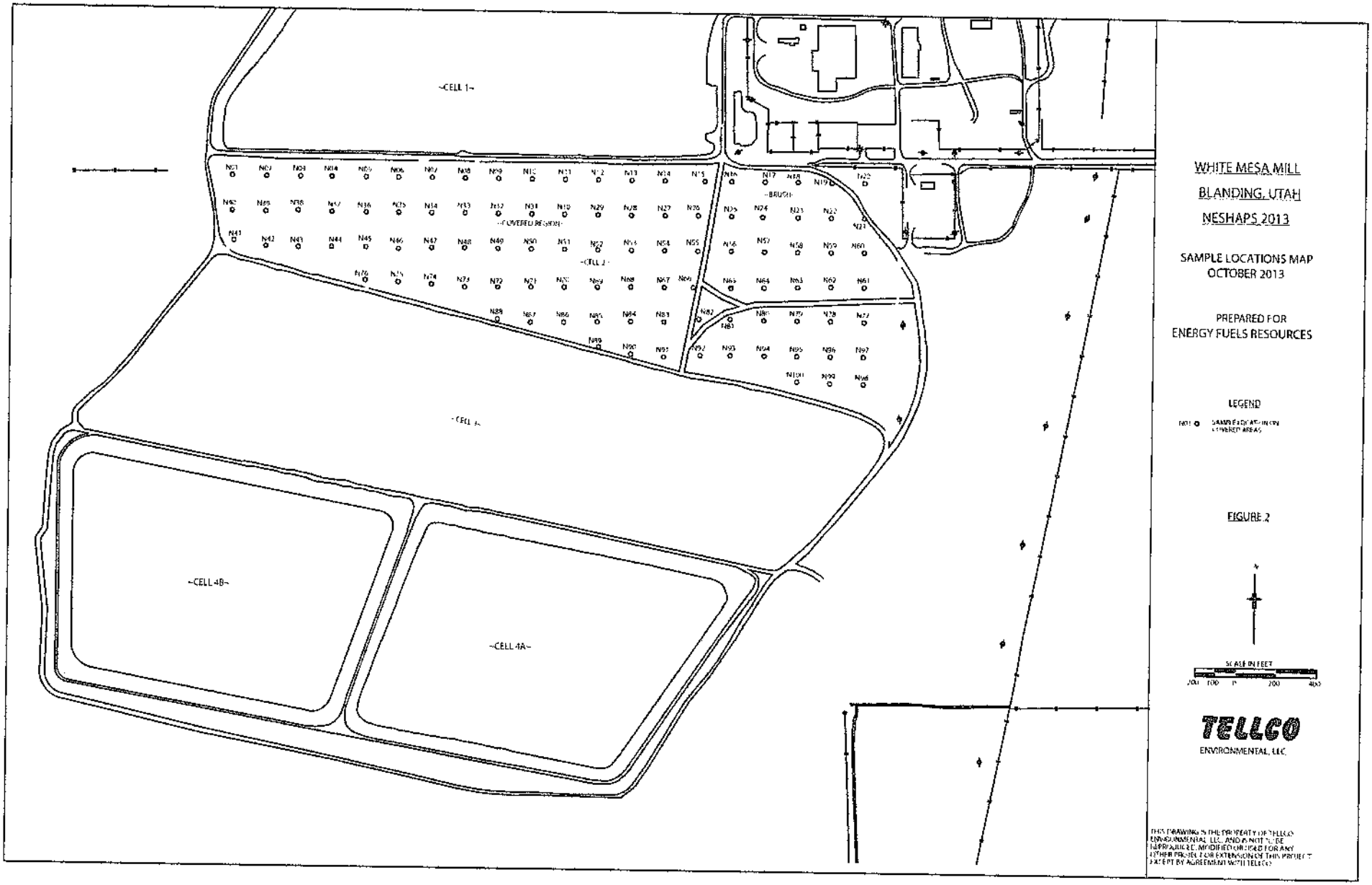
BLANK CANISTER ANALYSIS:

0.4 MIN
119.3 MAX

GRID LOCATION	SAMPLE I. D.	RETRIV HR	RETRIV MIN	ANALYSIS MO	ANALYSIS DA	ANALYSIS YR	MID-TIME HR	MID-TIME MIN	CNT (MIN)	GROSS COUNTS	GROSS WT IN	RADON pCi/m²s	± pCi/m²s	LLD pCi/m²s	COMMENTS:
N BLANK 1	N BLANK 1	7	42	8	41	10	9	13	10	11	10	1627	212.4	0.01	0.02	0.03	CONTROL
N BLANK 2	N BLANK 2	7	42	8	41	10	9	13	10	11	10	1577	210.3	0.01	0.02	0.03	CONTROL
N BLANK 3	N BLANK 3	7	42	8	41	10	9	13	10	25	10	1617	209.4	0.01	0.02	0.03	CONTROL
N BLANK 4	N BLANK 4	7	42	8	41	10	9	13	10	25	10	1600	212.6	0.01	0.02	0.03	CONTROL
N BLANK 5	N BLANK 5	7	42	8	41	10	9	13	10	36	10	1576	209.2	0.01	0.02	0.03	CONTROL
											AVERAGE BLANK CANISTER ANALYSIS FOR THE CELL 2 COVER REGION:		0.01	pCi/m²s			

Appendix D

Sample Locations Map (Figure 2)



WHITE MESA MILL

BLANDING, UTAH

NESHAPS 2013

SAMPLE LOCATIONS MAP
OCTOBER 2013

PREPARED FOR
ENERGY FUELS RESOURCES

LEGEND

N01 ⊙ SAMPLE LOCATION
COVERED AREAS

FIGURE 2

N

SCALE IN FEET

200 100 0 200 400

TELLCO
ENVIRONMENTAL, LLC